The Effects of Self-Prompting and Recruiting Adult Attention on Daily Living Skills: An Analysis of Hypothetical Data

HONORS THESIS

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Abstract

The purpose of this study was to provide an analysis of hypothetical data assessing the effectiveness of a self-prompting and recruiting adult attention training package on the accurate completion of daily living tasks and recruiting steps by students with moderate to severe disabilities. Three students who had goals addressing daily living skills included on their individual education programs (IEPs) were introduced to the training packages in their respective classrooms. The dependent variable was the percent of steps completed accurately for each learning trial, measured using a 10-item task analysis specific to each task. Six steps included information on proper completion of the task, whereas the last four steps described how to properly recruit teacher attention. A multiple probe across participants design demonstrated a functional relation of the intervention package on the number of task steps and recruiting steps completed accurately.

Dedication

This study is dedicated to my grandparents, Fran and Lacy Lang, who have supported me in every aspect of my life, education, and career. This study is also dedicated to my students, both past, present, and future, who encourage me to be a lifelong learner.

Acknowledgments

I would like to thank my advisor, Dr. Sheila Alber-Morgan, for offering up her expertise and guidance to help me complete this study. I would also like to thank Dr. Moira Konrad and Dr. Laurice Joseph for serving as my committee members. I also wish to thank Dhwani Parikh, who dedicated her time, support, and knowledge into helping me become successful. I greatly appreciate their willingness to help me complete this thesis, and the contribution they have made to this work.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Individuals with disabilities are often characterized as either within the mild to moderate or moderate to severe range. These distinctions are drawn based on how severe the limitations are within the thirteen disability categories described in the Individuals with Disabilities Education Act (IDEA). These categories include autism, deaf-blindness, developmental delay, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment including blindness. Individuals with moderate to severe disabilities tend to struggle with a wide range of social, emotional, academic, vocational, and daily living skills. These difficulties are present in a variety of settings, including their community, school, vocational, and home (Rouse, Everhart-Sherwood, & Alber-Morgan, 2014).

Independent living has been considered a goal for individuals with all disabilities for decades (Matson, 1981). The reasons for this include a desire for the person to feel self-fulfillment, as well as having the ability to fulfill the valued societal role of independence (Canella-Malone et al., 2006). Yet, according to the National Longitudinal Survey of Transition-2, or NLTS-2, only 65% of adults with a learning disability, 63% with emotional disturbance, 58% with other health impairment, 55% with visual impairment, 51% with speech or language impairment, 50% with hearing impairment, 42% with traumatic brain injury, 36% with intellectual disability, 30% with orthopedic impairment, 26% with deaf-blindness, 17% with autism, and 16% with multiple disabilities live independently (NLTS-2; Newman et al., 2011). Daily living skills are critical for independent functioning. These skills encompass a wide range of activities, such as toileting, laundry, dishes, bathing, dressing, eating, and other actions that

one may perform regularly to maintain health and safety (Stabel, 2013). Individuals with moderate to severe disabilities oftentimes require the same intensity of instruction provided to daily living skills as are typically used to teach academic content (Duker, Didden, & Sigafoos, 2004).

For adults with a moderate to severe intellectual disability, deficits in daily living skills have proven themselves to be detrimental to everyday functioning. In a study of two hundred and four adults with profound ID, researchers Belva and Matson (2012) utilized the *Vineland Adaptive Behavior Scales* to collect data on the participants' daily living skills and found that participants possessed deficits in a wide range of adaptive behaviors, including personal care, domestic skills, and community skill sets. This indicates a need for daily living skills to be addressed and specifically taught in this population.

A multitude of different interventions has been employed to address the acquisition and instruction of daily living skills for individuals with disabilities. One of the evidence-based practices supported by the U.S. Department of Education and Council for Exceptional Children is known as response prompting and refers to any assistance given to an individual that aids them in utilizing a specific skill (Neitzel & Wolery, 2009). Examples of systematic response prompting strategies include least-to-most prompting (providing gradually more intrusive assistance), most-to-least prompting (providing gradually less intrusive assistance), and graduated guidance (only providing assistance when needed) (Cooper et al., 2020). The prompting method used in this study's training package was least-to-most prompting. Success least-to-most prompting has been demonstrated when teaching daily living skills to students with severe disabilities across different age sets (McDonnell & Ferguson, 1989; Rodericks, 1999; Sabielny & Canella-Malone, 2014).

Prompting can take many forms of verbal and auditory cues (e.g., pictures, videos). For example, video prompting, or utilizing videos to deliver cues or steps to perform a specific skill, has seen great success in improving various skill sets, including daily living, for adult individuals with developmental disabilities (Banda et al., 2011, Sani-Bozkurt & Ozen, 2015, Smith et al., 2013, Van Laarhoven et al., 2012). Least-to-most prompting is a systematic procedure for teaching new skills in which the level of teacher support gradually increases with each attempt until the individual can demonstrate the skill independently (Hudson, Browder, & Jimenez, 2014).

Various prompting methods have demonstrated effective outcomes for a wide range of skills. Once students acquire a skill, they can learn to self-prompt to maintain that skill. Self-prompting allows the learner to complete each step of a skill independently by providing themselves with cues (visual, auditory, or tactile). This decreases dependence on the teacher (Riffel et al., 2005). First, learners listen to or look at a direction for a step, complete the step, and then return to the system to receive information about the next step to be completed (Mechling & Stephens, 2009). A major benefit of this method is its potential for generalization and maintenance throughout a variety of skill sets, as well as the level of independence through which it may be performed (Cullen & Alber-Morgan, 2015). For example, a learner using self-prompting to learn how to wash dishes may later be able to extend the skill by using self-prompting again when learning how to purchase an item at the store. The prompt can be delivered in a variety of media, including pictures, text, and videos. Multiple forms of delivery allow for the instructor to choose the method which is most efficient for them (Van Laarhoven et al., 2010) This strategy has been used to target a variety of skill sets, including community mobility/travel, vocational skills such as using a copy machine, transitioning between activities,

and behavior management (Bereznak et al., 2012; Bruhn et al., 2015; Cihak et al., 2008). Some studies have even resulted in students developing their own self-prompting systems (Shepley et al., 2017).

Self-prompting has also seen success when used to teach daily living skills. For example, Mechling & Seid (2011) combined visual and auditory prompting to teach the daily living skill of pedestrian travel to three high school students with moderate intellectual disabilities using a personal digital assistant (PDA). They first looked at a visual prompt (photograph), pressed the photo to hear an auditory prompt (description of the step), and could then play a short video of the landmark they were to be heading toward. When using this prompting system, students showed an increased number of steps correctly completed, and greater independent travel.

In order for prompting or any other intervention to be effective, positive reinforcement must be part of the package. Positive reinforcement refers to following a target behavior with a consequence that will increase the future likelihood of that behavior. Positive reinforcement can be in the form of verbal praise and attention, activities, tokens, food, or tangibles such as stickers or trinkets (Lalli et al., 1999; Ingvarsson et al., 2009). Reinforcement may be delivered continuously (after each target response) or intermittently. Intermittent schedules can include fixed ratio, variable ratio, fixed interval, and variable interval (Cooper et al. 2020) all of which determine when reinforcement is given to learners. Reinforcement delivery can be predictable (fixed) or unpredictable (variable) and based on time schedules (interval) or number of responses (ratio). The selection of reinforcers and schedule for delivery is based on the needs and skills of the individual learner.

Although reinforcement is usually delivered by instructors who determine when and how reinforcement will be delivered, the technique of recruiting reinforcement requires students to

play a more active role. Recruiting refers to appropriately calling the instructor's attention to the learner's accomplishments to receive reinforcement and/or feedback. It is unique in that it allows the learner greater independence, can result in praise, and can help instructors give immediate feedback and correction if necessary (Alber & Heward, 2000). Immediate delivery of feedback, and when necessary, remediation, in and of itself has been seen to improve student behaviors and skills (Duhon et al., 2015). Recruiting reinforcement has seen success in ages ranging from preschool to high school and with mild to moderate disabilities and emotional/behavior disorders (Alber & Heward, 2000; Alber et al., 2005; Craft et al., 1998; Kittelman et al., 2018).

Recruiting reinforcement has been largely studied in how it relates to acquiring academic skills. It has been seen to improve math proficiency, social studies achievement, language arts skills, spelling, and social skills (Alber et al., 1999; Albert et al., 2005; Wolford et al., 2001; Craft et al., 1998, Morgan et al., 1983). In more recent studies, both evidence-based practices of self-prompting and of recruiting reinforcement have been used together for individuals with disabilities. Rouse et al. (2014) sought to determine the effects of teaching self-monitoring and recruiting teacher attention on the acquisition, generalization, and maintenance of pre-vocational tasks for two sixth-grade boys with a moderate to severe intellectual disability. The results indicated that the use of these techniques combined increased the accuracy of pre-vocational task performance and recruiting responses. The study also acknowledged the need for future studied to address different ages, ability levels, settings, and types of tasks.

The present study is a replication of the study completed by Rouse et al. (2014) Rouse and her team looked at the effects of self-monitoring and recruiting teacher attention on the acquisition, generalization, and maintenance of pre-vocational skills for two sixth grade boys with moderate to severe intellectual disability. Similar to this study, we intend to utilize picture

prompt checklists to guide participants in accurate task completion and recruitment of adult attention. The picture prompt checklists allow for participants to self-monitor their fulfillment and accuracy of the present task. The present study seeks to expand upon the previous literature by focusing on a high school population for participants, and by targeting the acquisition of daily living skills.

Research Questions

1. What are the effects of a self-prompting and recruiting reinforcement package on the accurate completion of daily living tasks and recruiting steps completed accurately by three 16-18 year old students identified with moderate to severe disabilities?
2. Can three 16-18 year old students diagnosed with moderate to severe disabilities generalize the use of a self-prompting checklist to other daily living tasks without additional training?
3. What are the opinions of the students about the effectiveness of a self-prompting and recruiting reinforcement package?

Chapter 2: Method

All methods are based on hypothetical data and information created by the researcher.

Participants and Setting

Participants were three 16 to 18-year-old students, one male named Bob and two females named Anna and Mary, diagnosed with moderate to severe developmental delay. Each of them had daily living IEP goals. Participants attended a school specialized for students with moderate to severe disabilities. Data were collected in the student's classroom while they completed the task of handwashing, indicated as a need in their IEP goals and upon discussion with their classroom teacher. The classroom consisted of eight students, one lead teacher, two aids, and the experimenter. Participant demographics and related information can be found in Table 1.

Experimenter

The experimenter was an undergraduate student in special education with a specialization in moderate to severe disabilities.

Materials

Picture prompt

To begin engaging with the handwashing task, students were given a laminated piece of paper with the Boardmaker® handwashing picture and label "wash hands" as the task prompt. The picture prompt can be found in Appendix A.

Self-monitoring picture prompt checklist

In the pre-intervention training and intervention conditions, each student was given a self-monitoring picture prompt checklist that consisted of Boardmaker® pictures and words on a strip of paper. These checklists were placed on the corner of each student's desk to allow them to self-monitor for accuracy and completion of the task. The checklist included six picture prompts:

(a) do your work, (b) look at the picture, (c) check your work and fix, (d) raise your hand, (e) quietly wait for the teacher, and (f) put bin away. The self-monitoring picture prompt checklist can be found in Appendix B.

Task bins

Each student had a "hand washing" task bin located in the back of their classroom where they were easily accessible. It was labeled with the same Boardmaker® picture as the laminated picture prompt. The materials consisted of Dial liquid hand soap and a hand towel. A picture of the task bin can be found in Appendix C.

Photo model

During the training and intervention phases, a photo of the completed task was taped to each task bin. This allowed for students to self-check their final result for accuracy before they recruited teacher attention for feedback. The photo model can be found in Appendix D.

Definition and Measurement of Dependent Variables

Total steps completed correctly

The primary dependent variable was the total number of task analysis steps completed correctly (out of 10) for each task. The first six steps on each task analysis were specific to completing the task, whereas the final four steps were specific to recruiting adult attention. An observer was present for all data collection sessions and used a 10-item task-analysis recording sheet to document the completion of each step. If the student completed a step correctly, the observer recorded a plus sign next to that step. If the student skipped a step or didn't complete a step correctly, the observer left that spot blank next to that step on the task-analysis recording sheet. The task analysis recording forms can be found in Appendix E.

Recruiting steps completed correctly

The secondary dependent variable was the number of steps completed correctly (out of 4) for recruiting teacher attention. These four steps were (1) raise hand (within 10 seconds of completing task), (2), quietly wait for staff member (no talking or noise), (3) indicate to staff that work was completed, and (4) receive feedback and put bin away. Feedback was provided in the form of standardized praise statements concerning the task. For example, "great job, you turned on the water!" If the student completes something incorrectly, an error correction procedure was used. For example, if the water was not shut off or soap was not used, the experimenter verbally prompted the students to fix their mistakes, and students were then given praise afterwards based on the correctly completed task.

Experimental Design

A multiple baseline across participants design was used to examine the effects of self-monitoring and recruiting attention on number of task steps completed accurately. The following experimental conditions were implemented: baseline, training, intervention, and maintenance.

Treatment Integrity and Interobserver Agreement

Interobserver Agreement (IOA)

Prior to data collection, the experimenter reviewed each of the task analyses with the second observer and provided definitions and examples of correct responses and incorrect responses for each step. Interobserver agreement (IOA) data were collected across each condition (baseline, intervention, and maintenance). For Anna, the second observer was present for 40% of baseline sessions, 60% of intervention sessions, and 50% of maintenance sessions. For Bob, the second observer was present for 70% of baseline sessions, 40% of intervention sessions, and 60% of maintenance sessions. For Mary, the second observer was present for 40% of baseline sessions, 55% of intervention sessions, and 65% of maintenance sessions. The

primary and second observers simultaneously and independently recorded the number of tasks and recruiting steps completed accurately for each student for each of their three tasks. Agreements and disagreements were examined for each step on an item-by-item basis. IOA was calculated by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100.

Treatment Integrity

Treatment integrity data were collected during 100% of baseline sessions and at least 90% of intervention sessions and maintenance sessions to determine the extent to which the experimenter implemented the baseline and intervention procedures correctly. For baseline, the second observer used a 2-item checklist and recorded whether or not the experimenter followed each step. The baseline checklist consisted of 2 steps: direct student to begin work and redirect attention if the student was off task for more than two minutes. For intervention, the second observer used a 5 item procedural checklist and recorded whether or not the experimenter implemented each procedural step. The procedures were as follows, 1) provides students with task bin and picture prompt, 2) prompts students to start their work, 3) check students' work, 4) provides feedback and praise, and 5) prompts students to fix errors if necessary and provides praise. Treatment integrity checklists can be found in Appendix F.

Procedure

Pre-baseline training of daily living tasks

The students had no prior training with the target daily living skill of handwashing. For the student to become familiar with the picture prompt, the experimenter conducted pre-baseline training for each student using a different daily living skill of hair brushing. The experimenter used the following steps to teach the student to use the picture prompt. First, the experimenter

introduced the picture prompt with a Boardmaker® picture that matched the task. Next, the experimenter modeled how to complete the task, and used verbal prompting and feedback to guide students through performing each step of the task. Once each student was able to complete at least five steps of the task independently, baseline data collection began. Each participant needed one day of pre-baseline training.

Baseline

During baseline, the experimenter placed the picture prompt on each student's desk and instructed them to look at the photo and complete their work. No other visual or verbal prompts were provided during task completion. The students were expected to complete the 10 steps of their task independently with no set time limit. Student responses were recorded using the task analysis recording form. Errors were not corrected during baseline. Redirection was provided through the use of a verbal prompt if students were off task for more than two minutes.

Pre-intervention training of self-monitoring checklist

The self-monitoring checklist used in this study was new to all three students. Consequently, pre-intervention training for using the checklist was necessary. Pre-intervention training of the checklist consisted of the experimenter teaching the checklist to each student for the non-targeted daily living skill of hair brushing. There were six picture prompt strips on a piece of paper: (a) do your work, (b) look at the picture, (c) check your work and fix, (d) raise your hand, (e) quietly wait for the teacher, and (f) put bin away. The teacher read the checklist aloud to each student, modeled each step, verbally prompted the student to perform each step, and provided feedback. The intervention began once the student was able to complete at least 5 steps completely on the task analysis. Each student needed one day of training.

Intervention

During the intervention, the experimenter placed the picture prompt and self-monitoring checklist on each student's desk and told them to start their work. The students used the self-monitoring checklist to independently complete the task of handwashing.

Maintenance

The criterion for beginning the maintenance phase was completing ten steps correctly across three consecutive intervention sessions. During maintenance, picture prompts were placed on the student's desk but the self-monitoring checklist was removed from their desk.

Generalization

To assess generalization, students completed two new daily living tasks of tying shoes and brushing teeth in the same classroom with the same checklist and adults present during the maintenance phase. They were observed and data was recorded to determine whether or not the students were able to generalize their self-monitoring and recruiting skills to a new task without further instruction.

Social Validity

Social validity questionnaires were used to obtain the opinions of the participants about the intervention. For the student participants, the following five questions were asked: 1) Do you think the checklist helped you complete your task? 2) Do you feel more independent when completing the task using the checklist? 3) Do you think that you will continue to use checklists to help you complete tasks? 4) Do you think the checklist helped you to complete steps correctly? 5) Did you enjoy using the picture prompt checklists to do your work?
This questionnaire was used to analyze the practicality and significance of the intervention methods. The social validity questionnaire can be found in Appendix G.

Table 1.

Participant Demographics

Name	**Age**	**Grade**	**Ethnicity**	**Gender**
Anna	17	12th	African American	Female
Bob	16	11th	Asian American	Male
Mary	18	12th	Caucasian	Female

Chapter 3: Results

This chapter will present results and data for each of the three participants. All results are based on hypothetical data and information created by the researcher. Hypothetical results related to IOA, social validity, and treatment integrity will also be reported. Figure 1 shows the number of steps completed correctly in each phase for each student while Table 2 shows the mean percentages of recruiting steps completed correctly for each student.

Anna

The first data set on the graph in Figure 1 shows the number of steps completed correctly (out of 10) for the daily living skill of hand washing for Anna. In baseline, Anna's responses were stable at 2 steps completed correctly (mean: 2.0) across all three sessions.

During intervention, Anna performed between 4 and 10 steps correctly (mean: 7.8). Data in this phase showed an upward trend before reaching 10 steps correct for at least 3 consecutive sessions, which was the criterion for beginning maintenance. Anna's number of steps correct increased significantly throughout sessions. During the maintenance and generalization phase, Anna continued to perform at high levels of accuracy, performing between 9 and 10 steps correctly (mean: 9.9).

Table 2 shows the mean percentages of recruiting steps completed correctly (out of 4) as a separate measure from the total number of steps. Mean percentage of recruiting steps for Anna was 0% in baseline, 72% in intervention, and 100% in maintenance and generalization.

Bob

The second data set on the graph in Figure 1 shows the number of steps completed correctly (out of 10) for the daily living skill of hand washing for Bob. In baseline, Bob's responses were stable with between 2 and 3 steps completed correctly (mean: 2.6).

During intervention, Bob performed between 4 and 10 steps correctly (mean: 7.9). Data in this phase showed an upward trend before reaching 10 steps correct for 3 consecutive sessions, which was the criterion for beginning maintenance. Bob's number of steps correct increased significantly throughout sessions. During the maintenance and generalization phase, Bob continued to perform at high levels of accuracy, performing 10 steps correctly (mean: 10) across all 6 sessions.

Table 2 shows the mean percentages of recruiting steps completed correctly (out of 4) as a separate measure from the total number of steps. Mean percentage of recruiting steps for Bob was 25% in baseline, 78% in intervention, and 100% in maintenance and generalization.

Mary

The third data set on the graph in Figure 1 shows the number of steps completed correctly (out of 10) for the daily living skill of hand washing for Mary. In baseline, Mary's responses were moderately stable with between 4 and 6 steps completed correctly (mean: 4.6).

During intervention, Mary performed between 7 and 10 steps correctly (mean: 9.2). Data in this phase showed an upward trend before reaching 10 steps correct for 3 consecutive sessions, which was the criterion for beginning maintenance. Mary's number of steps correct increased significantly throughout sessions. During the maintenance and generalization phase, Mary continued to perform at high levels of accuracy, performing between 9 and 10 steps correctly (mean: 9.7).

Table 2 shows the mean percentages of recruiting steps completed correctly (out of 4) as a separate measure from the total number of steps. Mean percentage of recruiting steps for Mary was 50% in baseline, 83% in intervention, and 100% in maintenance and generalization.

Interobserver Agreement (IOA)

IOA was calculated using total agreement (agreements divided by agreements plus disagreements, multiplied by 100). Table 3 shows IOA for each condition for each student. IOA ranged from 86% to 100% in baseline, 88% to 100% in intervention, and 98% to 100% in maintenance.

Treatment Integrity

Treatment integrity was calculated by dividing the number of steps completed correctly by the total number of steps and multiplying that by 100. Treatment integrity across conditions was found to be 100%. The checklists used to calculate treatment integrity can be found in Appendix F.

Social Validity

All three participants completed the social validity questionnaire. The participants answered all five questions positively, selecting the happy face for each. Their collective responses suggest that all the participants found the intervention to be both enjoyable and useful.

Figure 1. Number of task steps completed correctly per participant. A closed circle represents the handwashing task. An open triangle represents the generalization brushing teeth task. An open square represents the generalization tying shoes task.

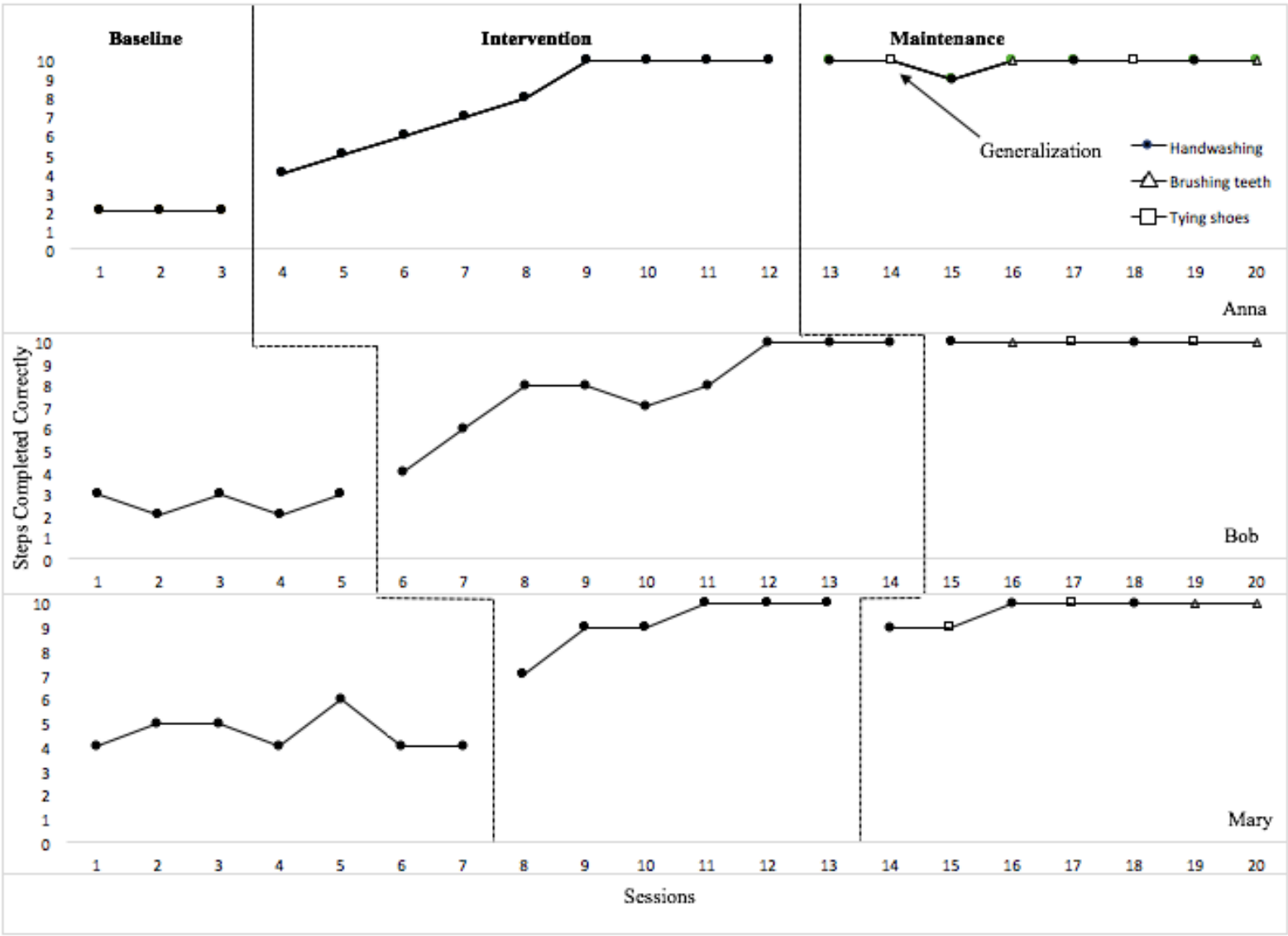

Table 2.

Mean percent of recruiting steps performed correctly

	Baseline	Intervention	Maintenance
Anna	0%	72%	100%
Bob	25%	78%	100%
Mary	50%	83%	100%

Table 3.

Mean percent IOA

	Baseline	Intervention	Maintenance
Anna	90%	100%	98%
Bob	86%	94%	100%
Mary	100%	88%	98%

Chapter 4: Discussion

The purpose of this study was to assess the effectiveness of a self-prompting and recruiting adult attention training package on the accurate completion of daily living tasks and recruiting steps by three 16 to 18 year old students identified with moderate to severe disabilities. A multiple probe across participants design demonstrated a functional relation of the intervention package on the number of task steps and recruiting steps completed accurately for all three students.

During baseline, Anna's data was stable with 2 steps correct. During intervention, Anna performed at a substantially higher level with a range of 4 to 10 steps correct. Bob's baseline performance was also fairly stable with a range of 2 and 3 steps correct, but jumped to a range of 4 and 10 steps correct during intervention. Mary's data was moderately stable during baseline with a range of 4 and 6 steps correct, and improved significantly to a range of 7 and 10 steps correct when intervention was introduced.

Once intervention began, the patterns of responding for each student demonstrated how quickly their accuracy of completing the daily living skill of hand washing improved. Criteria was reached in a timely manner, and upon termination of the intervention they retained high levels of accuracy in completing the task. In baseline, number of recruiting steps completed correctly was minimal, but upon maintenance was 100% across all participants and sessions. This shows the skills to be maintained, thus validating the usefulness of the self-prompting checklist.

These results support the findings of previous research that both self-monitoring (e.g., Bereznak et al., 2012; Bruhn et al., 2015; Cihak et al., 2008; Mechling & Seid, 2011) and recruiting reinforcement (e.g., Alber et al., 1999; Albert et al., 2005; Wolford et al., 2001; Craft

et al., 1998, Morgan, Young, & Goldstein, 1983) are useful tools that result in successful behavior change. This study was a systematic replication of Rouse et al. (2014) and extends the findings to a different population and a different skill set. In Rouse et al. (2014), the participants were two 12-year-old students diagnosed with moderate to severe disabilities. In the current study, however, the participants were between 16 and 18 years of age and diagnose with moderate to severe disabilities. Assessing these interventions on a different population extends their effectiveness across different age ranges. In Rouse et al. (2014), participants competed three pre-vocational tasks throughout the intervention. In the current study, participants each completed one daily living skill task. This helps to extend the research by evaluating the effectiveness of the intervention on different skill sets. Generalization measures in Rouse et al. (2014) focused on the participants' ability to generalize the self-monitoring checklist to untrained tasks, and this study replicated these generalization methods.

Social validity data indicated that the students enjoyed the intervention and found it to be useful. They all felt it helped them to complete their task and steps, made them feel more independent, was enjoyable, and indicated that they would use the checklist again in the future. This questionnaire validates the social significance of the intervention for the students.

Limitations and Future Research

Although this study supported previous self-prompting and recruiting reinforcement research, it only did so for high schoolers identified with a moderate to severe disability. Future research may try to generalize these findings to other populations and environments. For example, different ages and ability levels may be examined. These students were located in a Midwestern school district, and future studies may look at students in other areas of the country and world, or outside of the school setting into the workplace, home, or care center. Different

types of tasks other than daily living skills targeted in this intervention may also be assessed, such as academic or vocational skills.

In this study, the recruiting steps and daily living task steps were included as part of the same dependent variable. Future research would be enhanced by a separate analysis of the recruiting steps and the task steps to see which behaviors were most influenced by the training package.

Generalization was limited as this study only evaluated the effects of the intervention on different daily living skill tasks in the same setting and with the same adults. Future research should attempt to assess generalization in several other settings with differing adults and stimuli present. Generalization probes were only collected during the maintenance phase so a functional relation could not be determined for generalization. In order for a functional relation to be determined, generalization probes must be collected during baseline so there is a point of comparison. Future research should include generalization probes in all phases of the study,

Social validity was limited as it only measured student responses. Social validity surveys may also be completed by teachers, paraprofessionals, parents, and support staff. Additionally, social validity may be measured in a more objective manner, such as through the use of third-party observations.

Implications for Practice

The results of this study demonstrated that self-prompting and recruiting adult attention was successful in increasing task accuracy for daily living skills with high school students with moderate to intensive disabilities. The picture prompts and self-prompting checklist is easily adaptable for other tasks and skill levels. All materials are inexpensive and typically readily available. The intervention took little time to create and implement, making it efficient in the

classroom, home, or work settings. This intervention encourages independence and student ownership of their learning and success.

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Appendix A: Picture Prompt

Appendix B: Self-Monitoring Checklist

Appendix C: Task Bin

Appendix D: Photo Model

Appendix E: Task Analysis

Hand Washing
1. Look at picture prompt
2. Locate bin/items
3. Use soap and water to clean hands
4. Use hand towel to dry hands
5. Self-check for accuracy (using photo)
6. Fix mistakes or determine correct
7. Raise hand (within 10 seconds of completing task)
8. Quietly wait for staff member (no talking or noise)
9. Indicate to staff that work was completed
10. Receive feedback and put bin away

Appendix F: Treatment Integrity Checklist

Baseline:

- ☐ 1. Direct student to begin work
- ☐ 2. Redirect attention if student becomes off task for more than two minutes

Intervention:

- ☐ 1. Provide student with task bin and picture prompt
- ☐ 2. Prompt student to start work
- ☐ 3. Check students work
- ☐ 4. Provide feedback and praise
- ☐ 5. Prompt student to fix errors if necessary and provide praise

Appendix G: Social Validity Questionnaire for Students

Do you think the checklist helped you complete your task?


Do you feel more independent when completing the task using the checklist?


Do you think that you will continue to use checklists to help you complete tasks?


Do you think the checklist helped you to complete steps correctly?

Did you enjoy using the picture prompt checklists to do your work?